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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,130	03/31/2004	Norbert Steven Parsoneault	SEA/3350	9169

50269 7590 10/26/2006

SEAGATE TECHNOLOGY c/o MOFO SF
425 MARKET ST.
SAN FRANCISCO, CA 94105

EXAMINER

KRAUSE, JUSTIN MITCHELL

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 10/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,130

Applicant(s)

PARSONEAULT ET AL.

Examiner

Justin Krause

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention 1 in the reply filed on August 25, 2006 is acknowledged.
2. Claims 15-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 25, 2006.

Information Disclosure Statement

3. Two Information Disclosure Statements were filed listing the same document, US 5,506,458. The examiner has considered the reference and has accordingly initialed one IDS, and lined through the duplicate.

Claim Objections

4. Claim 2 is objected to because of the following informalities: line 2 of claim 2 is awkward. It appears that --a-- should be inserted in front of the word "hole".
Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 6 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Usui (US Patent 5,924,798).

Usui discloses a fluid dynamic bearing motor comprising:

- a base (5a) having a bore hole
- a liner (5b) secured in the bore hole
- a rotor assembly (9) having a shaft (6) partially disposed within the liner and configured to rotate relative to the liner
- a fluid dynamic bearing disposed between the liner and the shaft

Regarding claim 2, the liner includes a bottom having a hole formed therethrough.

Regarding claim 6, the fluid dynamic bearing comprises a journal bearing (5c) and a thrust bearing (18).

Regarding claims 9 and 10, the process by which the product is made does not impart any additional device structure to the claim. The device of Usui is capable of being made by the claimed processes.

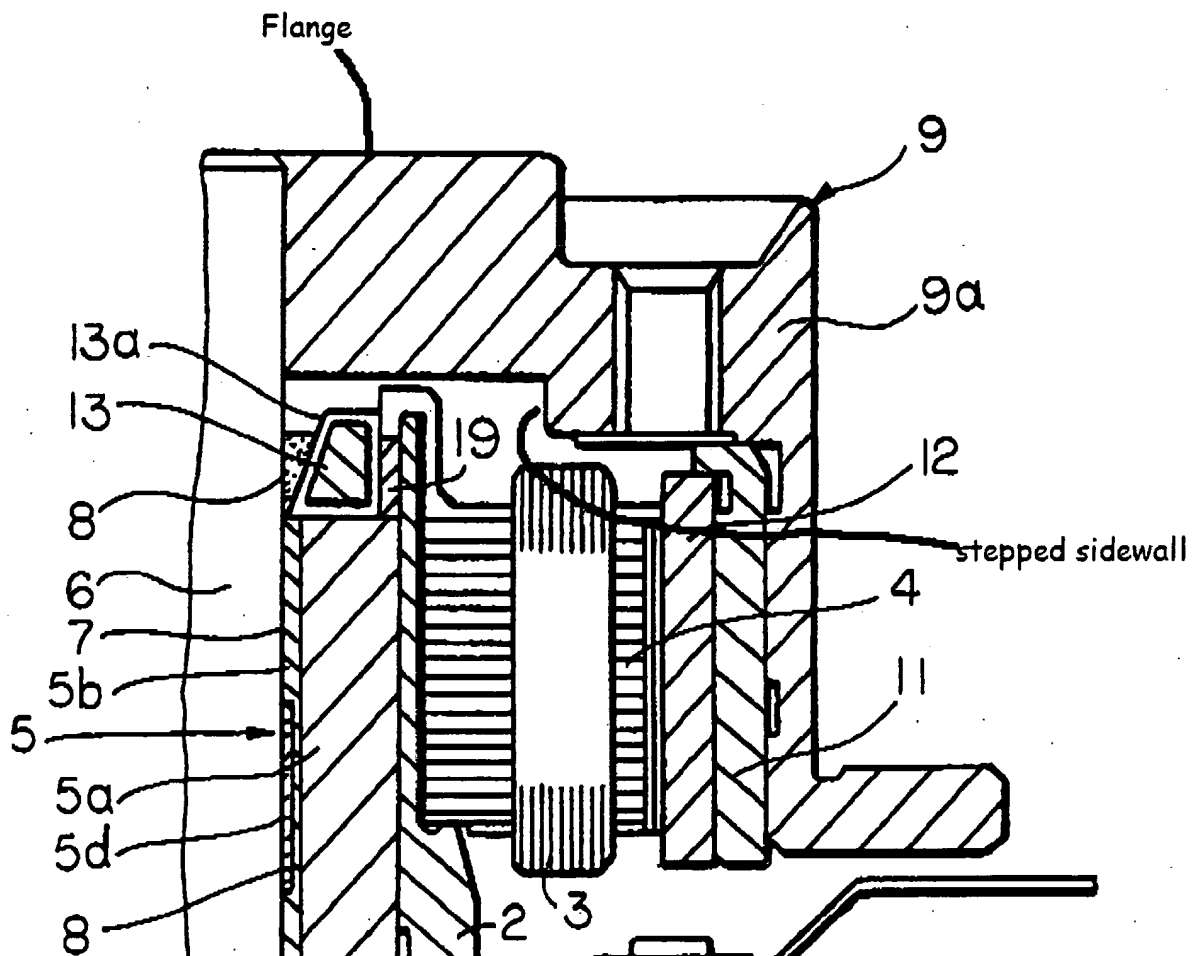
[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985), MPEP 2113 [R-1].

Regarding claim 11, the rotor assembly includes a hub (9), which is capable of being made by a cold working process. See MPEP 2113 [R-1]

Regarding claim 12, the process by which the product is made does not impart any additional device structure to the claim. The device of Usui is capable of being made by the claimed processes.

Regarding claim 13, the hub further includes a flange, and a stepped cylindrical sidewall extending from the flange and circumscribing at least a portion of the base.



Regarding claim 14, a magnet (12) is attached to the hub and a stator (4) is coupled to the base. The configuration in which the magnet generates a downward acting force on the hub is capable of being performed by Usui, however the limitation is functional in nature and carries minimal patentable weight.

"While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function." MPEP 2114.

7. Claim 1-3, 6-7, 9-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (US 2001/0022869).

Tanaka discloses a fluid dynamic bearing motor comprising:

- a base (11) having a bore hole
- a liner (12) secured in the bore hole
- a rotor assembly (14) having a shaft (13) partially disposed within the liner and configured to rotate relative to the liner
- a fluid dynamic bearing disposed between the liner and the shaft

Regarding claim 2, the liner includes a bottom having a hole formed therethrough.

Regarding claim 3, the base includes a recirculation channel (22) extending along a wall of the bore hole and along a bottom of the bore hole.

Regarding claim 6, the fluid dynamic bearing comprises a journal bearing (R) and a thrust bearing (S).

Regarding claim 7, the journal bearing is asymmetrically configured to pump bearing fluid towards a bottom of the liner. (Paragraph 0058)

Regarding claim 8, the journal bearing includes 2 grooved bearing surfaces. (12r/13r, see fig 1).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Titcomb (US Patent 5,516,212).

Tanaka discloses all of the claimed subject matter as described above, but does not disclose a capillary seal defined between a wall of the liner and a tapered section of the shaft.

Titcomb teaches a fluid dynamic bearing with a liner (28) and a capillary seal (62) between the liner and a tapered section of the shaft (46) to seal the lubricating fluid between the bearing surfaces. (col 7, line 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a capillary seal between the liner and a tapered section of the shaft as taught by Titcomb into the device of Tanaka, the motivation would have been to seal the lubricating fluid between the bearing surfaces.

Regarding claim 5, the bearing of Tanaka is configured to pump fluid through the hole in the bottom surface of the liner into the recirculation channel and into the reservoir. (Paragraph 0058)

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JKK
10/24/06


RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER